
HAN ZHENG

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EDUCATION

École Polytechnique Fédérale de Lausanne PhD candidate in Computer Science Supervisor: Prof. Mathias Payer	<i>2023 Aug - Now</i>
University of Chinese Academy of Science M.E. in Electronic Information Engineering	<i>2020 Aug - 2023 Jun</i>
Xidian University B.E. in Information Countermeasure Technique	<i>2016 Aug - 2020 Jun</i>

EXPERIENCE

École Polytechnique Fédérale de Lausanne Visiting Student in HexHive. Supervisor: Prof. Mathias Payer	<i>2021 Dec - 2022 Dec</i>
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PROJECTS

FishFuzz: Catch Deeper Bugs by Throwing Larger Nets Boosting the Multi-Target Directed Greybox Fuzzing by improving the precision of distance calculation and dynamically adjusting target priority. FishFuzz found 38 CVEs in exhaustively tested programs. 🏆 FishFuzz (’s extension) won 2nd Place in SBFT’24.	<i>USENIX Sec’23</i>
MendelFuzz: The Return of the Deterministic Stage Analyzing the key limitation of the deterministic stage in Coverage-Guided Greybox Fuzzing, further improves the deterministic stage by skipping redundant mutations. The new deterministic stage become default mode in AFL++. 🏆 MendelFuzz became the default mode in AFL++.	<i>FSE’25</i>
Squeezing Juicy Variant Bugs Out Of Modern Browsers Formalizing the bug variant analysis with a standardized model, covering both memory safety and logical vulnerabilities. Grape receives five CVEs from Chrome and one CVE from Microsoft. 🏆 Grape received 17,500 USD bounty from Google.	<i>USENIX WOOT’26</i>

AWARDS AND SCHOLARSHIPS

Google Cloud Research Credit , 500 CHF, Google	<i>2025 Jun</i>
SBFT FuzzBench Competition 2nd Place , 300 EUR, Google	<i>2024 Apr</i>
EDIC PhD Fellowship , 54,000 CHF, EPFL	<i>2023 Sep</i>
IC Master Scholarship , 22,400 CHF, EPFL	<i>2021 Dec</i>
Visiting Scholarship , 23,400 CHF, China Scholarship Council	<i>2021 Dec</i>

BUG HUNTING

Total Bug Bounty: 33,000 USD from Chrome VRP (2024-2025).
Google Leaderboard Ranking: #42 in Google Leaderboard (All Programs) 2024
VSCode: CVE-2025-32726 (Azure, High)

ChromeOS: CVE-2025-2509 (OpenGL, Medium)
Chrome: CVE-2026-2313 (Blink, High), CVE-2025-0438 (Tracing, High), CVE-2025-0436 (Skia, High), b/365802556 (Blink, High), CVE-2024-7968 (UI, High), b/349253666 (UI, Medium), CVE-2024-5846 (PDF, Medium), CVE-2024-5847 (PDF, Medium), CVE-2024-7018 (PDF, Medium)
WebRTC (not impacting Chrome): b/371686447 (WebRTC, High), b/371615496 (libyuv, Medium)
Wireshark: CVE-2024-0209, CVE-2024-0210
iOS / MacOS: CVE-2022-26981 (Font, High)

SERVICE

Technical Program Committee: ASE'26, ISSTA'26, FUZZING'26, ASE'25, FUZZING'25
Journal Reviewer: TSE, TOSEM, TIFS
Shadow TPC: NDSS'24, ISSTA'24

SKILLS

Coding: C, Python, GDB, LLVM, AFL/AFL++, Docker
Languages: Chinese (Mother Tongue), English (IELTS 7.0)

SUPERVISE / MENTOR

Zurab Tsinadze , Master@EPFL, Master thesis.	<i>2025 Jan - 2025 Jun</i>
Zezhong Ren , PhD@UCAS, PhD project.	<i>2024 Aug - 2025 Aug</i>
Wenhao Fang , Bachelor@St.Andrews, Summer@EPFL project.	<i>2026 Jan - Now</i>

TEACHING

MAN , Le cours de mise à niveau, (24 Spring)	<i>Teaching Assistant</i>
COM-402 , Information Security and Privacy, (24 Fall, 25 Fall)	<i>Teaching Assistant</i>
CS-412 , Software Security, (25 Spring)	<i>Teaching Assistant</i>

INVITED TALKS

Research Seminar at HKUST, Hong Kong. Hosted by Prof. Dongdong She	<i>2025 Jul</i>
Research Seminar at Tsinghua University, Beijing. Hosted by Prof. Chao Zhang	<i>2025 Jul</i>
ESEC/FSE'25, Trondheim. MendelFuzz presentation	<i>2025 Jun</i>
SBFT24@ICSE, Lisbon. FuzzBench competition report	<i>2024 Apr</i>
Research Seminar at HUST, Wuhan. Hosted by Prof. Wei Zhou	<i>2023 Jun</i>

PUBLICATIONS

- [6] **Han Zheng**, Flavio Toffalini, Qiang Liu, and Mathias Payer. Squeezing juicy variant bugs out of modern browsers. In *20th USENIX WOOT Conference on Offensive Technologies (WOOT 26)*, 2026
- [5] Zhezhong Ren, **Han Zheng**, Zhiyao Feng, Qinying Wang, Marcel Busch, Yuqing Zhang, Chao Zhang, and Mathias Payer. Sysphuzz and the pressure of more coverage. In *33rd Annual Network and Distributed System Security Symposium, NDSS*, 2026
- [4] **Han Zheng**, Flavio Toffalini, Marcel Böhme, and Mathias Payer. Mendelfuzz: The return of the deterministic stage. *Proceedings of the ACM on Software Engineering*, 2(FSE):44–64, 2025
- [3] **Han Zheng**, Flavio Toffalini, and Mathias Payer. Tunefuzz: Adaptively exploring target programs. In *Proceedings of the 17th ACM/IEEE International Workshop on Search-Based and Fuzz Testing*, pages 61–62, 2024

- [2] **Han Zheng**, Jiayuan Zhang, Yuhang Huang, Zezhong Ren, He Wang, Chunjie Cao, Yuqing Zhang, Flavio Toffalini, and Mathias Payer. **{FISHFUZZ}**: Catch deeper bugs by throwing larger nets. In *32nd USENIX Security Symposium (USENIX Security 23)*, pages 1343–1360, 2023
- [1] Zezhong Ren, **Han Zheng**, Jiayuan Zhang, Wenjie Wang, Tao Feng, He Wang, and Yuqing Zhang. A review of fuzzing techniques. 2021